TONE COMBINE

Version 0.1
Computing
COMP120

Joseph Walton-Rivers

This algorithm is used to combine two tones so they are played at the same time.

This algorithm depends on the sample rate, S, which is used to convert a duration in seconds to a duration in samples.

Algorithm 1 Tone Combine

Require:

$0 \leq f_{0...n} \leq 22050$ ▷ frequency
$1 \leq d$ ▷ Duration (in seconds)
S ▷ Sample Rate

Ensure:

A list, n, containing the tones corresponding to the frequencies, played for duration, d

```
1:  function COMBINE(d, w, f)
2:      n ← LIST
3:      for i = 0, i < dS do
4:          v ← 0
5:          for j = 0, j < len(f) do
6:              v ← v+ W(f_j, i)
7:          end for
8:          n ← v
9:      end for
10:     return n
11: end function
```